Regional Operations Forum Transportation Systems Management & Operations

Planning for Operations (P4OPS)

Planning for Operations

SHAPING OUR FUTURE

D11 Sub Regional, Corridor ROF/CMM April 12-14, 2016 – San Diego California

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What is Transportation System Management & Operations (TSM&O)?

Integration of projects, processes, systems, technology, performance measurement, organization and workforce to actively and efficiently manage and operate our transportation system.

What is Planning for Operations?

Supporting transportation system management and operations strategies in our multimodal planning











Planning for Operations

What is Planning for Operations?

Supporting system management and operations strategies in our multimodal planning.

- Multi-modal collaboration between agencies and jurisdictions
- Collaboration between planners and operators
- Focus on specific outcomes and regional objectives
- Prioritize investments to achieve operations objectives
- Demonstrate accountability through performance measures

Objectives-Driven, Performance Based





Where We Have Been: Insights from Past Practice

- Traffic Operations Strategies (TOPS) / "Lion King" meetings
- ITS Mainstreaming / ITS Architectures initiatives
- System Management Pyramid
- Strategic Growth Plan / CMIA Program, CSMPs





Our Charge: Transition to a Sustainable, System Management Culture

- SSTI Report / Caltrans Improvement Program
- Caltrans Strategic Management Plan
- California Transportation Plan
- FAST / MAP-21
- AB 32 / SB 375 / SB 743



Planning & Operations Coordination: The Planning Process

The major steps in the transportation system planning process?

- Basic goals Identification
- Study and analysis
- Plan or policy preparation
- Implementation
- Monitoring and feedback

The three Cs of the planning process?

"Cooperative" is defined to include not only cooperation between the federal, state, and local levels of government but also among the various agencies within the same level of government.

"Comprehensive" is defined to include the basic elements of a 3C planning process.

"Continuing" refers to the need to periodically reevaluate and update a transportation plan.



Transportation System Management & Operations The Planning Process

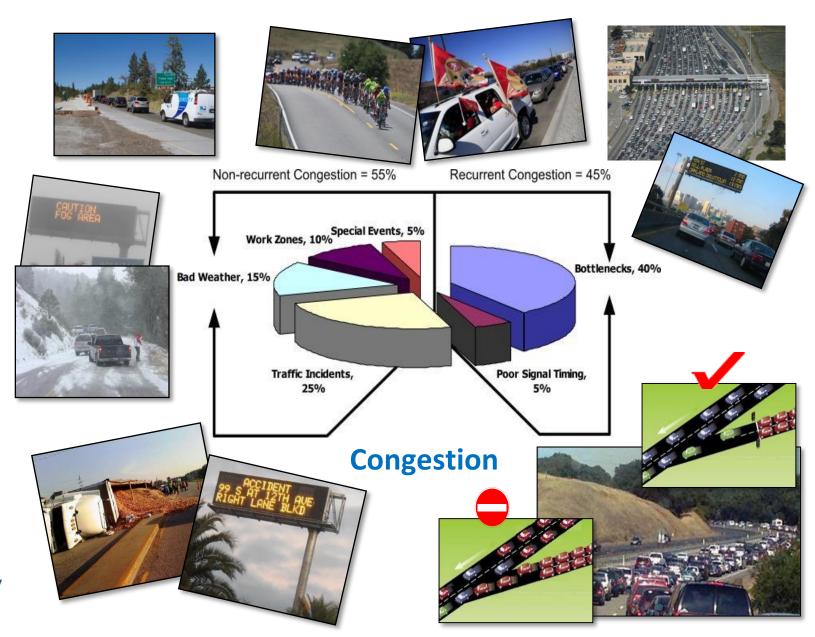
Traditional Approach to Managing Transportation

- Predict future (long range) traffic volumes
- Fund major capital projects to provide additional capacity
 This only addresses 45% of the congestion problem
- Also becoming more and more difficult to provide new capacity



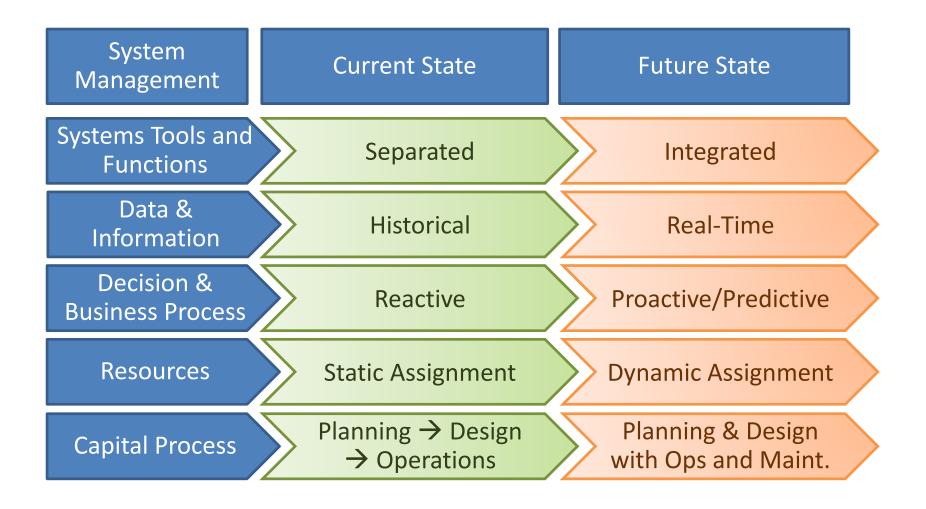
Transportation System Management & Operations The Planning Process

Managing Transportation





System Management – Current and Future State





System Management links the Planning and Operations functions

Organizational Focus

Planning

(Mostly Medium to Long Term)

- System Planning
- Regional
- Community
- Environmental
- · Transit/Rail
- Project

Missing Link (continuous)

System Management/

Planning

- Performance
- Measurement
- -Modeling & Analysis
- -Comprehensive Corridor Plans
 - Quality Data

Operations

(Mostly Day-to-Day)

- Incident Management
- Ramp Metering
- Arterial Management
 - Traveler Info



How Are We Shaping Our Future?

- Transportation System Management & Operations
 - TSM&O Goals and Policy (TMS Business Plan 2013)
 - CTIP Needs 10 Yr -Performance Based
 - Making the case for operational investments, link to goals Fix It First
 - TSM&O Program Plan Regional Ops Forums/CMM Workshop
 - D3 RCTO / ITS-Operations Plans

Connected Corridors

- I-210 Pilot Corridor
- Corridor Performance Reports Templates
- Technical Assistance and Training
- District 7 Operations (and Planning) Reorganization
- Planning for Operations (P4Ops)
 - P4Ops Charter Team and Strategic Work Plan
 - Statewide P40 workshops



TSM&O Cornerstones

TSM&O Policy: Draft DP-08 R1

Intelligent Transportation
 Systems: DD-70-R1

California Department of Transportation

Serious drought. Help save water!

Director's Policy

Number:

DP-08-R1

Effective Date:

TBD by DBFS Administrator

Supersedes:

DP-08 (12/30/1992), DP-26 (08/2006)

Responsible

Program:

Traffic Operations

TITLE

Transportation System Management and Operations

POLICY

In order to optimize California's transportation system's performance for all system users and modes, the California Department of Transportation (Caltrans) commits to effective Transportation System Management and Operations (TSM&O). TSM&O is the integration of projects, business processes, systems, technology, performance measurement, organization and workforce to actively and efficiently manage California's transportation system. In partnership with others, Caltrans uses TSM&O to preserve system capacity, while improving safety, security, reliability, and sustainability.

INTENDED RESULTS

The intent of this policy is to promote TSM&O strategies as crucial tools in meeting Caltrans mission to provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability. TSM&O strategies are essential to a performance-based decision making process Caltrans will use to improve the efficient and effective operation of the transportation network. Examples of TSM&O strategies include:

- Ramp metering
- Traffic signal synchronization
- Intelligent Transportation Systems (ITS)
- Real time traveler information
- Incident and special event management
- Managed lanes
- Traffic Management Plans (TMPs)
- Dynamic lane management



Planning for Operations

Planning for Operations Charter Team

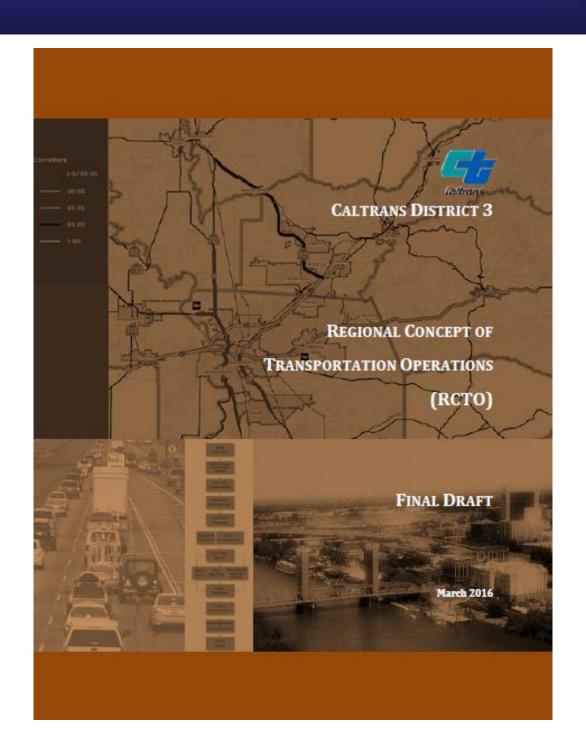
Will identify and prioritize performance-based multi-modal planning practices that support TSM&O. This will be accomplished by advising on the development of a Planning for Operations Strategic Work Plan.

Planning for Operations Strategic Work Plan

Will create a statewide framework for planning for operations.

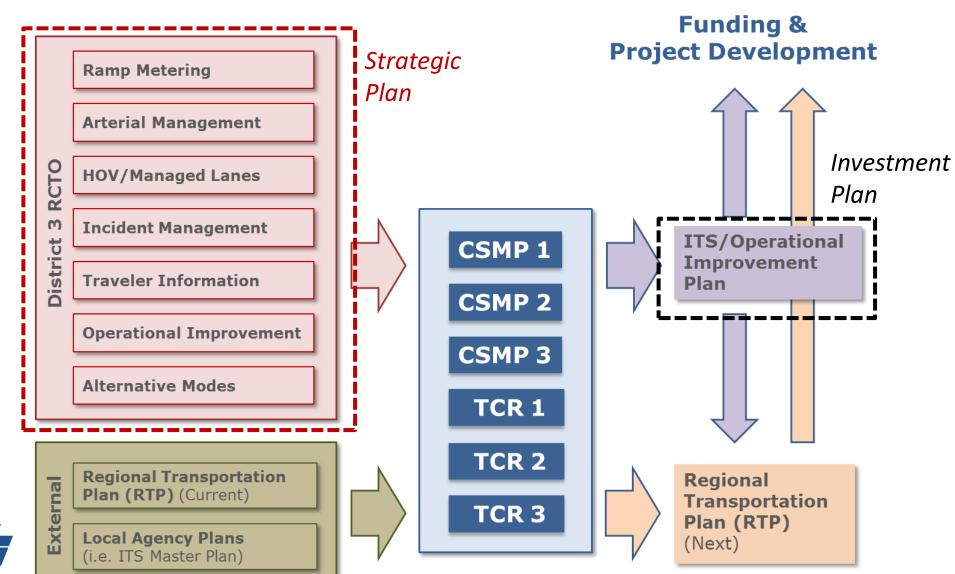
- Define Planning for Operations Program Goals
- Inventory Existing System Management-related Policies, Programs and Processes
- Review System Management Planning Organizational Relationships, Staff Capabilities and Expertise
- Evaluate Roles and Responsibilities Related to System Management Planning at Caltrans
- Evaluate Opportunities for System Management Planning Process Improvements
- Identify Information Gaps and Responsibilities for Data Gathering and Analytics
- Identify Collaboration and Communication Needs
- Develop Planning for Operations Strategic Work Plan and Implementation Framework



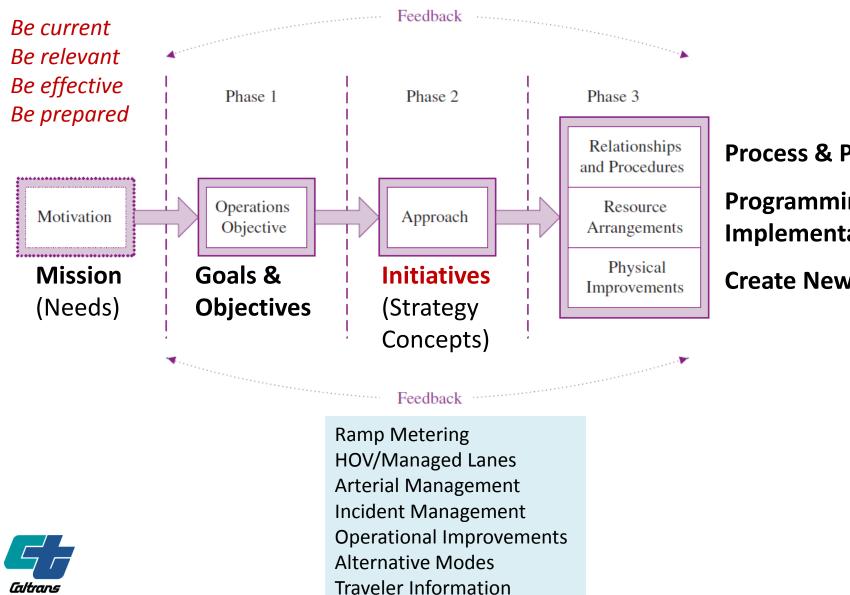




Process for planning for future operations







Process & Partnerships

Programming & Implementation

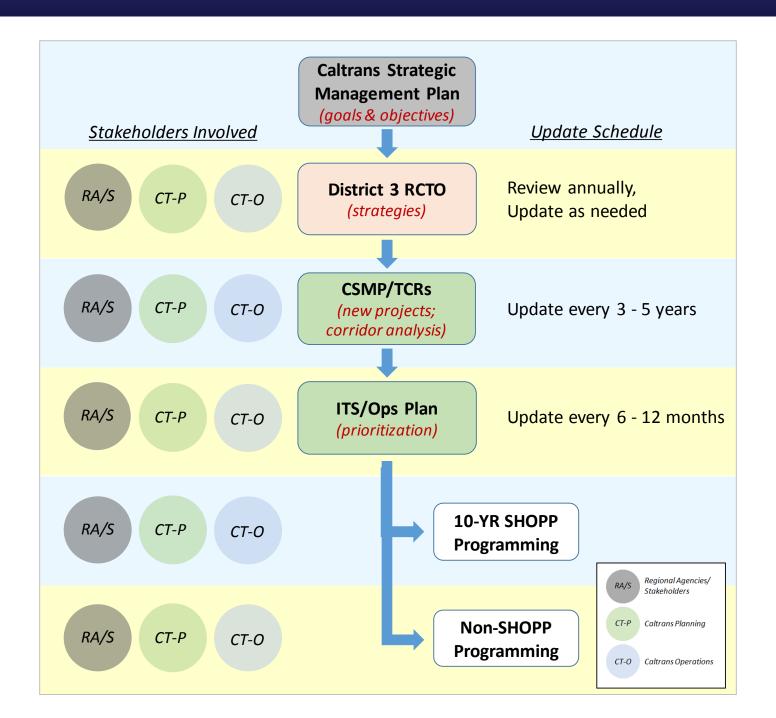
Create New Projects

RCTO Initiatives for Ramp Metering by Corridor

RAMP METERING	US 50	I-80	I-5/SR 99	SR 51	SR 65
Establish corridor RM performance monitoring	0			0	
Implement corridor-wide RM				0	
Prepare for future Advanced RM (Coordinated RMS)				0	
Develop new RMS projects by corridor-wide by county				0	
Implement Connector Metering		0		0	0
I-5/I-80		0			
US-50/SR-99, US-50/I-5	0				
I-80/SR-65, I-80/SR-244		0			0
SR-51/SR-244				0	
Implement Advanced RM (Coordinated RMS)	0	0		0	0
Prepare for future ICM (Integrated RMS)	0	0		0	0
Implement ICM (Integrated RMS)				0	0
Integrate other technology applications into RMS	0	0		0	0









Gaps and Opportunities

- Defining roles, responsibilities and necessary skills
- Making the case for operational investments, link to goals
- Articulating a system management vision with quantifiable benefits
- Institutionalizing collaboration, partnerships
- Performance-based decision-making and system monitoring
- Better integrate operations into planning and funding processes



Thank You!

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